

## Office Memorandum • UNITED STATES GOVERNMENT

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## SECURITY INFORMATION

TO : [REDACTED], Acting Chief, A/EC  
THRU : Chief, Materials Division [REDACTED]  
FROM : Acting Chief, Ferrous Metals Branch

DATE: 11 December 1951

SUBJECT: Project No. 110-51. "Economic Capabilities of the Soviet Bloc to Support a General War." Steel Consumption.

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During the recent meeting which you and [REDACTED] held with Ferrous Metals Branch, the question arose as to whether steel would best be reported in terms of rolled products or raw steel. The writer has discussed this matter with [REDACTED] (Chief, D/I) 25X1A9a and we have arrived at the conclusion that the best unit would be in terms of raw steel.

We based our conclusion mainly on the fact that an appreciable amount of steel consumed is not from the finished rolled product stage, but consists of forgings which are made from semi-finished material, namely blooms and billets and in the case of some heavy forgings directly from the ingot stage. Rather than to convert such items into terms of rolled products, it is more accurate to convert everything back to raw steel.

In order to be consistent all analysts including the military estimating steel consumption should use the same conversion factors. The following factors are fairly representative of USSR industry:

<u>Product</u>	<u>Average % Yield From Ingot to Product</u>
1. Blooms, billets, slabs (except shell steel)	85.
2. Billets (shell steel)	70.
3. Rails	75.
4. Pipes and tubes	68.
5. Plates (rolled armor)	55.
6. Rolled bars for shell steel	68.
7. Forgings (before machining)	
a) Armor plate	55.
b) Others (press, open hammer, drop and upset)	57.
8. Wheels and axles	60.
9. All other finished rolled steel	72.
10. Fabricated products (end items)-will vary with the product and can be determined best by the analyst in charge.	

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